MORRISON

FOERSTER

425 MARKET STREET SAN FRANCISCO CALIFORNIA 94105-2482

TELEPHONE: 415.268.7000 PACSIMILE: 415,268,7522

WWW.MOFO.COM .

MORRISON & FORRSTER LLP

NEW YORK, BAN FRANCISCO. LOS ANGELES, PALO ALTO. SAN DIEGO, WASHINGTON, D.G.

DENVED, NORTHERN VIRGINIA. DRANGE COUNTY, SACRAMENTO, WALNUT CREEK, CONTURY CITY

TORYO, LONDON, BEIJING, SHANGHAL HONG KONG, SINGAPORE BRUSSELS

RECEIVED **CENTRAL FAX CENTER**

To:

BEST AVAILABLE COPY

OCT 1 2 2006

NAME:		FACSIMILE:	
MS PETITION US Patent and Trademark Office		(571) 273-8300	15 4 0.00
	•		
From:	Michael R. Ward	DATE: Cotober 12	2006

Reg. No. 38,651

with cover page:	Number of pages with cover page:	8	
------------------	----------------------------------	---	--

Preparer of this slip has confirmed that facsimile number given is correct:

7638/VAW2

CAUTION - CONFIDENTIAL

This facsimile contains confidential information which may also be privileged. Unless you are the addressee (or authorized to receive for the addressee), you may not copy, use, or distribute it. If you have received it in error, please advise Morrison & Foerster LLP immediately by telephone or facsimile and return it promptly by mail,

Comments:

ATTORNEY DOCKET NO.: 506612000100

SERIAL NO.: 10/006,290

FILING DATE: October 22, 2001

INVENTOR(S): Jay WOHLGEMUTH et al.

TITLE: LEUKOCYTE EXPRESSION PROFILING.

Papers attached herewith:

- 1. Transmittal 1 page
- 2. Petition From Restriction Requirement 6 pages :

NO. 678 P. 2

OCT 1 2 2006

BEST AVAILABLE COPY

Under the Paperwor	It Reduction Act of 1895, no per	sons are required to res			PTO/SB/21 (09-04 for use through 07/S1/2008, OMB 0651-003 Office; U.S. DEPARTMENT OF COMMERCE		
Under the Paperwork Reduction Act of 1995, no persons are required to res			Application Number		10/006,290		
TRANSMITTAL			Filing Date		October 22, 2001		
	FORM	·	First Named Inventor		Jay WOHLGEMUTH, M.D.		
(to be us	ed for all correspondence afte	f initial filing)	Art Unit		1634		
	,	·	Examiner Name		B. L. Sisson		
Total Numbe	er of Pages in This Submis	sion 7	Attorney Docket Num	ıber	506612000100		
	EN	ICLOSURES	(Check all that ap	ply)			
Fee Trans	mittal Form	Drawing(s)		Τr	After Allowance Communication		
Foe	Attached	Licensing-rel	ated Papers		Land to TC Appeal Communication to Board of		
				-	Appeals and Interferences Appeal Communication to TC		
Amendme	nt/Reply	X Patition (From Requirement	n Restriction) - 6 pages		(Appeal Notice, Brief, Reply Brief)		
After	After Final Petition to Co				Proprietary Information		
Affidavits/declaration(s) Power of		Power of Attor	mey, Revocation rrespondence Address	-	Status Letter		
		Terminal Disc	•		Other Enclosure(s) (please Identify below):		
Express Abandonment Request Reque		Request for	-		Lidentily below): . Fax Cover Sheet.		
Information Disclosure Statement					·		
Certified Copy of Priority		CD, Number of CD(s)			• •		
Document((\$)	Landscape Table on CD		•			
Reply to Missing Parts/ Remarks					•		
Repl	y to Missing Parts under FR 1.52 or 1.53						
	SIGNATI	JRE OF APPLICA	NT, ATTORNEY, O	RÁC	BENT		
Firm Name	MORRISON & FOE		stomer No. 20872)			
Signature	ature michaelland						
Printed name	Michael R. Ward			•			
Date 10 12 06		R è g. No.	3	38,651			
I heresty would be their state of the same							
I hereby certify that this paper (along with any paper referred to as being effected or empised) is being transmitted by facsimile to the Patent and Trademark Office, facsimile no. (571) 273-8300, on the date shown below. Dated: Output							

RECEIVED CENTRAL FAX CENTER

OCT. 12. 2006 6:39PM

MOFO 28TH FL

OCT 1 2 2006

NO. 678

P. 3

BEST AVAILABLE COPY

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office, facsimile no. (571) 273-8300, on the date shown below.

Dated: Signature: (Victoria A. Wison)

Docket No.: 506612000100

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Jay WOHLGEMUTH et al.

Application No.: 10/006,290

Confirmation No.: 8497

Filed: October 22, 2001

Art Unit: 1634

For: LEUKOCYTE EXPRESSION PROFILING

Examiner: B. L. Sisson

PETITION FROM RESTRICTION REQUIREMENT

MS Petition Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Applicants hereby petition the Commissioner to review the requirement for restriction in the above referenced application, as mailed September 23, 2005, and made "Final" in the Office Action mailed February 13, 2006. Specifically, Applicants request reconsideration of the restriction as applied to the ten (10) nucleic acid sequences recited in the claims of Group V.

Since Applicants made an election with traverse of Group V and SEQ ID NO: 4758 and requested reconsideration of the restriction requirement on November 22, 2005, Applicants have satisfied the statutory requirements for filing the instant petition.

I. Background to Petition

A restriction into eight (8) groups of claims was mailed September 23, 2005. In the restriction, the Examiner also articulated a "Sequence Restriction Requirement Applicable to Groups I-VII," requiring that Applicants elect a single sequence. As support for the rejection, the Examiner cited MPEP § 803.04, presumably for its characterization of nucleotide sequences

OCT. 12. 2006 6:39PM MOFO 28TH FL

Docket No.: 506612000100

BEST AVAILABLE COPY

Application No.: 10/006,290 2

encoding different proteins as structurally distinct chemical compounds and the categorization of such sequences as "independent and distinct inventions within the meaning of 35 U.S.C. § 121."

Applicants respectfully disagree with the restriction requirement.

II. There is no serious burden on the Examiner

The Examiner appears to believe that a restriction requirement is proper simply because there are independent or distinct inventions. However, this is simply not the law. A restriction requirement is only proper when the inventions are independent or distinct <u>and</u> there would be a <u>serious</u> burden on the Examiner if restriction was not required. MPEP § 803(I).

The sequences at issue are short 50-mer sequences set forth in Table 8. In view of the existing widely available resources for sequence searching, a search of 10 such nucleic acids cannot be considered to constitute a serious burden. In order to search for relevant prior art, the Examiner merely needs to copy the sequences in the present claims, paste them into an Internet database, and select the search button or hit the "enter" key.

Furthermore, under section 803.02 of the MPEP, if the members of a Markush group can be examined without serious burden, the Examiner must examine all members even though they may be directed to independent and distinct inventions. A limited number of Markush members or a close relation between Markush members can support a finding that a search can be made without serious burden. MPEP § 803.02. Present claim 55 is directed to a Markush group of 10 nucleic acid sequences. Although the MPEP fails to offer guidelines as to what size of Markush group is small enough to avoid incurring a serious burden on the PTO, surely it is safe to assume that 10 nucleic acid sequences, which has been deemed to be a generally reasonable number for examination purposes in MPEP §803.04, would also be small enough to satisfy the Markush group "undue burden" test for a restriction requirement.

Application No.: 10/006,290 3 Docket No.: 506612000100

Since the Examiner faces no serious burden when examining the ten nucleic acid sequences, Applicants respectfully submit that the restriction requirement is improper and request withdrawal of the requirement.

Ш. The burden on Applicants and society far exceeds the burden on the PTO

As made clear by § 803.04, the section of the MPEP setting forth special rules for restriction of nucleotide sequences, the burden on Applicants should also be considered when determining whether to issue a restriction requirement, particularly with respect to biotechnology companies.

The burdens of restricting the pending claims to a single sequence are particularly acute in this case. Applicants not only face the long development times faced by all biotechnology companies, but also work at a small start-up company with limited resources. The Examiner's maintenance of the restriction requirement will force Applicants to incur the expense of filing nine (9) additional divisional applications, each of which will cost approximately \$10,000 to prepare, file and prosecute. The initial cost of filing the application will be further compounded by the additional maintenance and docketing costs for each application. All of these additional costs. which are a direct result of the restriction requirement, will place a severe financial burden on Applicants.

Given the limited resources of Applicants, such a financial burden will have substantial effects on the company, potentially forcing the company to downsize and limiting its ability to serve society by practicing its invention. Applicants' claimed invention is a method for monitoring or diagnosing transplant rejection by detecting the expression level of certain nucleic acids. A biopsy, the traditional method for detection of transplant rejection, is time-consuming, painful, and can involve the added risks of infection, organ damage and organ puncture. With the present invention, it is no longer necessary to subject transplant patients to multiple biopsies. Applicants' Allomap™ molecular expression test, an embodiment of this invention, is currently used to analyze samples from over 20 medical centers.

OCT. 12. 2006 6:40PM

MOFO 28TH FL

NO. 678 P. 6

BEST AVAILABLE COPY

Application No.: 10/006,290

4

Docket No.: 506612000100

In addition to imposing significant financial costs, maintenance of the restriction requirement will also impair outside investment in the company, an essential source of working capital for small start-up companies like the one at which Applicants work. Parties will not invest in a company unless they believe they will obtain a fair return on their investment. A patent allows Applicants to reassure investors that they will have a period of exclusivity during which they will enjoy the unparalleled competitive advantage of being the only party on the market with a particular invention.

Finally, in addition to the burden on Applicants themselves, the Examiner's insistence on maintaining the restriction requirement also places a significant burden on society. As mentioned previously, the financial pressures on Applicants will limit availability of this invention to society. Furthermore, by restricting the present application so that a single sequence is the subject of each application, the Examiner is burdening the PTO with examination of ten applications instead of a single application. This duplication of effort wastes the time of the PTO's employees, who we understand are already burdened by the increasing number of applications being filed. If the PTO cannot handle its existing workload, why force applicants to file nine divisional applications?

As described above, if the restriction requirement is withdrawn, the Examiner simply needs to copy the text of each of the nine remaining sequences provided in the claims and perform an Internet search in order to examine the sequences of the claims. In light of the significantly larger burdens on Applicants and society imposed by the restriction requirement, Applicants respectfully request that the restriction requirement be withdrawn.

IV. Under the current MPEP guidelines relating to restriction of nucleotide sequences, ten sequences should be examined

In the case of nucleotide sequences, the PTO has officially recognized that "normally ten sequences" [can] ... constitute a reasonable number for examination purposes," and explicitly states that its rationale is to aid the biotechnology industry. MPEP § 803.04. The MPEP presents this as a general rule, conceding only that in some exceptional cases will the complex nature of the claimed material require that the reasonable number of sequences to be selected to be less than ten. MPEP §

RECEIVED CENTRAL FAX CENTER

OCT 1 2 2006

NO. 678 P. 7

OCT. 12. 2006 6:40PM MOFO 28TH FL

BEST AVAILABLE COPY

Application No.: 10/006,290

5.

Docket No.: 506612000100

803.04. As an example of what type of invention is considered to have a complex nature, the MPEP cites a claimed protein amino acid sequence reciting three dimensional folds.

The presently claimed invention is a method for diagnosing or monitoring transplant rejection in a patient comprising determining the expression level of a nucleic acid, where the nucleic acid comprises a nucleic acid selected from the group consisting of SEQ ID NO: 3702, SEQ ID NO: 2073, SEQ ID NO: 213, SEQ ID NO: 3028, SEQ ID NO: 4758, SEQ ID NO: 6299, SEQ ID NO: 832, SEQ ID NO: 2143, SEQ ID NO: 3651, and SEQ ID NO: 3750. The claimed sequences are nucleic acids without any particular structural limitations beyond the nucleotide sequence. By any measure, it is difficult to see how one could consider such sequences to have a complex nature that would require the number of sequences to be limited to less than ten.

Furthermore, the PTO has previously found claimed sequences having a nature similar to those in the present case to be sufficiently simple to be examined in a single application. Currently pending application 10/325,899 assigned to Expression Diagnostics, Inc., has pending claims directed to ten nucleic acid sequences undergoing active prosecution. The present Examiner has failed to offer any reason why the sequences of 10/325,899 are suitable for examination in a single application, while the presently claimed sequences are not.

Thus, given the special MPEP guidelines relating to examination of nucleotide sequence claims, the presently claimed ten nucleic acid sequences should be rejoined and subject to examination.

V. Conclusion

In view of the above, Applicants respectfully assert that all ten sequences in the Markush group cited in claim 55 should be examined together. Given the existing Internet databases for sequence searching, examination of all 10 sequences in a single application will not constitute a serious burden on the Examiner. Moreover, this burden is very slight compared to the burden placed on Applicants and society by filing nine additional applications. Finally, the PTO itself has recognized that ten sequences will normally constitute a reasonable number of sequences for

BEST AVAILABLE COPY

Application No.: 10/006,290

6

Docket No.: 506612000100

examination purposes and in particular, has recognized this for sequences having a structure similar to those under examination in this application. Accordingly, Applicants request withdrawal of the restriction requirement and joinder of all ten sequences listed in claim 55 as amended in the response filed May 15, 2006.

Applicants have timely traversed the restriction requirement in this application. Applicants have submitted this petition within the time limits imposed by 37 C.F.R § 1.144. We have not identified a fee associated with this petition. If this is incorrect, the Commissioner is authorized to charge the cost of such fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 506612000100.

Dated: 10/2/2006

Respectfully submitted,

Michael R. Ward

Registration No.: 38,651

MORRISON & FOERSTER LLP

425 Market Street

San Francisco, California 94105-2482

(415) 268-6237